2-21-2012

General Education Subcommittee Agenda, February 21, 2012

Utah State University

GENERAL EDUCATION COMMITTEE

February 21, 2012
8:30 a.m. – 9:30 a.m.
Champ Hall Conference Room

Agenda

Call to Order - Norm Jones

Approval of Minutes - January 17, 2012

Course Approvals

ARTH 3840 (CI) ..... Rhonda Miller
ARTH 4520 (CI) ..... Rhonda Miller
AV 3720 (CI) ..... Rhonda Miller

Course Removals

Syllabi Approvals

USU 1320 (BHU) Carol McNamara .....Brian McCuskey
USU 1340 (BSS) David Cassidy/Susan Neel..... Roberta Herzberg
USU 1300 (BAI) Michael Petersen.....Craig Petersen

Business
Update on proposed USU 1370/3070 ..... Christie Fox
(*See below*)
Report on USU 1360 faculty meeting ..... Norm Jones
Review of Depth Courses ..... Norm Jones/Nancy Mesner

Other Business

Next Meeting
Tuesday, March 20, 2012 Champ Hall Conference Room
8:30 a.m.

TO: Gen Ed Subcommittee
FROM: Christie Fox, Honors Program
DATE: 14 February 2012

Attached please find a syllabus for approval for HONR 3070: Rhetorics and Genres of Science. As this is a new class, I would like to articulate specifically how this course meets the criteria for a depth humanities and depth science course.

- understand processes of acquiring knowledge, and understanding science issues involving the global community.

Students will investigate scientific discovery across a broad spectrum of genres, including peer reviewed publications, review articles, science journalism, science fiction literature and film, and other popular media. Close attention will be paid to how each genre and each writer positions her perspective and scientific knowledge as credible. For their final project, students will have to conduct a quantifiable research experiment and present the results to the class for analysis and discussion

- recognize different ways of thinking, creating, expressing and communicating through a variety of media.

One of the key objectives of the course is to teach students to identify the rhetorical differences between different genres and media for the same discovery. To that end, students will learn to evaluate credibility and to distinguish between, say, the goals and rhetorical devices of a media report and those of a scientific policy statement.

- understand diversity in value systems and cultures in an interdependent world.

As students trace scientific discovery across genres and media, they will be asked to interrogate how the demands of an audience helps a writer shape her argument, including the choices she makes about genre and media.

- develop a capacity for self-assessment and lifelong learning.

Students will present their work to the entire class at least twice in the semester, once on how a particular scientific discovery is presented across different genres and once on their findings from their own experiments. This scaffolding of presentations will help students take ownership of the choices they make in presenting science and their own findings.

- providing a foundation for better understanding the scientific method.

After being taught the scientific method and discussing its presentation across genres and media, students will be led through the scientific method in conducting their own, small-scale, quantifiable experiments.

Rhetorics and Genres of Science

USU/Honors 3070 (5 credits)

Instructors

Dr. Joan M. Hevel, Associate Professor, Biochemistry, joanie.hevel@usu.edu
Dr. Ryan M. Moeller, Associate Professor, English, rylish.moeller@usu.edu

Course Description

This course investigates the role of science in contemporary US culture from a variety of perspectives and media in order to answer one central question: In what ways does science impact our culture? We will read a variety of texts—from science fiction novels and short stories to rhetorical theory and scientific publications—and view a variety of media—from journalism to film and television—in order to discover how our culture values science and the scientific process and portrays it through its cultural products. Students will be exposed to scientific concepts expressed through a variety of genres (e.g. peer-reviewed publication, review essay, policy/legislation, and popular media) where the validity of the science in each case will be discussed. Students will also take part in conducting a scientific study (hypothesis-experiment-data collection-analysis) on how people understand the credibility of science through specific media.

Course Outcomes

By completing this course, students will be able to:

- understand processes of acquiring knowledge and information;
- reason logically, critically, creatively, and independently, and be able to address problems in a broad context;
- recognize different ways of thinking, creating, expressing, and communicating through a variety of media;
- understand diversity in value systems and cultures in an interdependent world.

Course Texts

Medical history & ethics	Skloot, Rebecca. *The immortal life of Henrietta Lacks*
Novels	Butler, Octavia. *Xenogenesis: Dawn* Crichton, Michael. *Jurassic Park* Doctorow, Cory. *Little Brother* Reichs, Kathy. *Virals* Wells, H.G. *The Time machine*
Films	*I am Legend* *Stargate* *Gattaca* *Alien*
Television	*Bones* Television Advertisements for products not approved by the FDA
Articles	A variety of readings on the rhetoric of science and scientific studies (peer reviewed articles, review articles, and items from popular media depicting science) made available digitally through Canvas.

Grading

Course Participation/Discussion	20%
Position Papers	25%
Group Presentation on Scientific Discovery through Media	25%
Experimental Report	30%

Course Outline

The course will be divided into three units, described below.

Unit 1: Cultural Representations of Science **Weeks 1-6**

This unit begins with discussing the biography of Henrietta Lacks, which situates science within a particular historical period and raises questions of the scientific process, medical/testing ethics, and access to technology. The unit then investigates popularized notions of science through science fiction and popular media. Fiction and popular media will be discussed alongside scientific literature in order to illustrate the scientific process and its popularization. Scientific topics will include the following:

- Genetics. Readings will include *Jurassic Park, Xenogenesis, I am Legend,* and *Gattica*.
- Forensic Science. Readings will include *Virals*; episodes from the television series *Bones*, based upon the work of the author of *Virals*; and *Alien*.
- Physics. Readings will include *Stargate* and *The Time Machine*. Class discussions will include a guest lecture from a physics professor.
- Gaming/Hacking Science. Readings will include *Little Brother* and a variety of genres on the study describing how Foldit gamers solved an AIDS puzzle.

Students will be assessed on their class participation/discussion an on position papers in which they discuss the science behind the readings.

Unit 2: Evaluating Credibility in Science Writing **Weeks 7-10**

This unit teaches students to differentiate between the various genres of science writing, especially between peer reviewed scholarship, review essays, scientific policy and legislation, and more popular forms. Alongside readings in each genre, students will read rhetorical theory in order to understand how authors establish science as credible in each case. Students will be assessed on their class participation/discussion and on a group presentation in which they present a scientific concept or discovery of their choice across the various genres of science writing discussed in the unit.

Unit 3: Establishing Credibility by Doing Science **Weeks 11-15**

In this unit, students will demonstrate their understanding of the scientific method by testing the central question of the course. As a class, we will generate hypotheses and design an experimental protocol for students to collect and analyze data. One possible protocol would have students showing a film clip to two groups of participants, some of whom have read some of the science behind the film and some of whom have not. Students will gather data and analyze it together as a class. Students will be assessed on their class participation/discussion and on their research reports.

Agriculture and/in Revolution:

The Case of Cuba

USU/HONR 3070 (5 credits)

Instructors:

J. P. Spicer-Escalante	Old Main 212	797-0709	jp.spicer@usu.edu
David Hole	Research Greenhouse 108	797-3455	david.hole@usu.edu

Cuba faces a future of providing food, and other necessities for its population. At the same time, cultural realities restrict degrees of freedom in solving problems related to food production and distribution. The challenges that Cuba faces certainly have aspects that require scientific and technical solutions, but said solutions are subject to the ideological and cultural decision-making of the Cuban Government: all development of national resources in Cuba are focused through the lens of the Revolution, which for Cubans is on ongoing, organic cultural and ideological phenomenon with a direct impact on resources allocation and the decision-making that is carried out in planned economies. The situations and problems rooted in the humanities and sciences that this course explores have no simple solutions. Given this fact, the course will be team-taught by professors Spicer-Escalante and Hole, specialists in the Humanities and Sciences.

Course Objectives: This course has multiple, inter-related goals. The overarching goal of this course is to allow students to synthesize and apply the knowledge that they have gained through breadth study in their own discipline, and apply it to new integrated situations that they encounter through focused study on Cuba and its agricultural policies. Rarely will problem-solving require expertise in only one single discipline, and this course invites students to expand their understanding of how knowledge is acquired; address problems in a broader, international context; recognize different ways of thinking, creating, expressing, and communicating; understand the broadly diverse value systems and cultures present in the globalized world; and develop the ability to self-assess, question and become life-long, citizen scholars. The additional element of providing an international experience both in the humanities and in agricultural science, and in fairly unknown and frequently misunderstood terrain—Cuba—will serve as an informal practicum for future USU global scholars.

In sum, this course will allow students to explore an unknown area (Cuba and its culture), inventory their own knowledge (or lack of), and take the steps necessary to educate themselves more about how science issues increasingly impact our global environment where it is critical that we all learn to observe, understand, and respect different cultural viewpoints. Problem-solving never takes place in a vacuum; scientific, cultural, political, economic, and geographic restrictions must always be taken into account. It is expected that students will apply the knowledge gained in the course to deepen their understanding of their own degree program as well as their lives.

Course Logistics: This course includes an experiential learning component in Cuba, and will consist of pre-departure coursework, on-site coursework while in Cuba, and additional coursework

post-arrival back in the U.S. The written coursework for the program will be incorporated into a learning portfolio that will be graded at the end of the spring semester when students present their work in a public forum. Critical to a successful experience in the course will be the willingness to actively participate in all aspects of the course. Your instructors intend to learn as much from you as you learn in the course (but no, you don't get a discount on tuition). Travel to Cuba is a requirement of the course. No exceptions can be made to this requirement.

To that end, it is critical that you have a valid passport for travel to Cuba. Visas and travel arrangements will be made through Common Ground Travel, an agency that has U.S. Dept. of Treasury authorization to book Cuba travel. Tentative fees to cover travel, housing, and meals in-country will be published prior to the start of the semester, but will not be finalized until final booking is arranged. A $500 deposit will be expected by the end of the first week of classes, and the USU Study Abroad Office will be involved in travel payments. Travel arrangements to the departure city (to be determined) are the responsibility of the students, but must meet with the approval of the instructors regarding timing both for the flight to Cuba, as well as the return flight to the US port of entry (and we don't want to see you living it up in first class while we are sweating back in coach).

Times: This course is a 5 credit hour class that will meet twice per week for 75 minutes (to be arranged on Tuesday and Thursday afternoons or evenings). The in-country visit to Cuba is planned for the week of spring break. For Spring semester 2013, the international travel will be scheduled for Saturday 09 March-Sunday 17 March.

Text: There are a number of texts and readings for this class that span the disciplines of science and the humanities. Readings will be made available to the class through digital reserve at the library, or as pdf files. It is expected that the students will initiate discovery of additional appropriate resources on Cuba to carry out the research for their final paper.

Background: The student is expected to have completed the Breadth course requirements and have met communication and quantitative literacy requirement. **No other pre-requisites are necessary.** Some chemistry and biochemistry is presented in the course, especially the biological polymers and their relationship in human nutrition, but the student should be able to understand the concepts presented without any previous biochemical background other than the Life Science Breadth course.

Grading: Weekly in-class assessments will focus on previous readings and course discussions. These will compose approximately 25% of the course grade. Students will prepare a learning portfolio. Student portfolios will be composed of: the 2-3 page written reflections on the readings for all class periods; a one page critical reflection paper per current event item on Cuba from pre-departure class sessions; daily diary entries while in Cuba of 2-3 pages in length; a 5-7 page critical reflection upon their experience in Cuba after travel to the island is carried out. These components constitute 50% of the course grade. Students must also include a 10-12 page academic paper on a topic chosen in consultation with the instructors that integrates their own academic discipline with appropriate current issues in Cuba. This paper and the final presentation will be worth the remaining 25% of the course grade (20% for paper, 5% for presentation). All coursework will be graded by both professors, who will also attend all class periods.

Conduct: It is distracting for the instructor and other students when individuals arrive late or leave early. If you can't attend class for the full time, please don't come. Cell phones should be turned off or set to silent during class lectures. It goes without saying that talking on the cell phone or texting during class is not appreciated and will not be accepted.

Outline: The tentative outline for topics is included on a separate page.

If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center, preferably during the first week of the course. Any requests for special consideration relating to attendance, pedagogy, taking of examinations, etc. must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative formats--large print, audio, diskette or Braille.

Course Outline

Week	Activity
07 Jan 2013 – 11 Jan 2013	Introductions and background
14 Jan 2013 – 18 Jan 2013	Tropical agriculture – similarities and differences to temperate agriculture. Introduction to travel literature. Readings: José Martí, "Our America"; selections from A contemporary Cuba reader: reinventing the Revolution and Travelers' Tales Cuba: True Stories (Travelers' Tales Guides).
21 Jan 2013 – 25 Jan 2013	Introduction to human nutrition: the macromolecules – starvation and starch. Readings: Bill McKibben, The Cuba diet: What will you be eating when the revolution comes? Harpers magazine April 2005
28 Jan 2013 – 01 Feb 2013	The role of art and ideology in revolution. Readings: Fidel Castro, "History will absolve me"; selections from A contemporary Cuba reader: reinventing the Revolution and Travelers' Tales Cuba: True Stories (Travelers' Tales Guides).
04 Feb 2013 – 08 Feb 2013	Sugar cane production – dangers of monoculture. Reading: OSU World food crops – Sugarcane Production, history and culture http://oregonstate.edu/instruct/css/330/seven/index.htm
11 Feb 2013 – 15 Feb 2013	The organic "revolution". Readings: Ernesto 'Che' Guevara, "Socialism and Man in Cuba"; selections from A contemporary Cuba reader: reinventing the Revolution and Travelers' Tales Cuba: True Stories (Travelers' Tales Guides).
18 Feb 2013 – 22 Feb 2013	Meeting with Study abroad office: Safety and travel. The

Week	Activity
	pragmatics of in-country travel in Cuba—"Do's and Don'ts in Cuba (or anywhere else for that matter)
25 Feb 2013 – 01 Mar 2013	Politics and food, a history of political interference in food production and distribution. Readings: Cuba's Food & Agriculture Situation Report by Office of Global Analysis, 2008 FAS, USDA
04 Mar 2013 – 08 Mar 2013	Last minute items. Readings: Raúl Castro Ruz, "Closing remarks by the First Secretary of the Communist Party of Cuba, Army General Raúl Castro Ruz, at the 6th Party Congress" (April 2011); selections from A contemporary Cuba reader: reinventing the Revolution and Travelers' Tales Cuba: True Stories (Travelers' Tales Guides).
09 Mar 2013 – 17 Mar 2013	Travel to Cuba – Itinerary on separate page
18 Mar 2013 – 22 Mar 2013	De-briefing: open discussion on experiences. What was the most important thing you learned about Cuba; about yourself?
25 Mar 2013 – 29 Mar 2013	Guest Lecturer: Matthew La Plante, Journalism (USU)
01 Apr 2013 – 05 Apr 2013	Guest Lecturer: TBD
08 Apr 2013 – 12 Apr 2013	Final presentations and discussion
15 Apr 2013 – 19 Apr 2013	Final presentations and discussion
22 Apr 2013 – 26 Apr 2013	Final presentations and discussion
29 Apr 2013 – 03 May 2013	Finals week-course wrap-up